



Patriot Foundation Systems Helical Piles, Tiebacks & Anchors		Ultimate Capacity Based Upon Torque (kips - kN) (1) (2)	Helix Bearing Plate Grade & Thickness (in - mm)	Section Coupling Method	Building Code Certifications
Round Corner Square Bar (RCS)					
Model FS-150	1.50 in - 38.1 mm EN-19 Yield Strength = 90 ksi (min)	Comp = 70 Kips - 311 kN Ten = 70 Kips - 311 kN	ASTM A36 0.375 in - 9.5 mm	(1) 0.75 in x 3.25 in ASTM325 Structural Bolt (1) 0.75 in Nut/ASTM A563 Grade DH	None
Round Shaft					
Model PF-300	O.D. = 2.875 in - 73.0 mm Wall = 0.217 in - 5.5 mm API 5CT - J55 Yield Strength = 55 ksi (min)	Comp = 53 Kips - 235 kN Ten = 53 Kips - 235 kN	ASTM A36 0.375 in - 9.5 mm	(2) 0.75 in x 4.0 in ASTM325 Structural Bolt (2) 0.75 in Nut/ASTM A563 Grade DH	None
Model PF-300(80)	O.D. = 2.875 in - 73.0 mm Wall = 0.276 in - 7.0 mm API 5CT - J55 Yield Strength = 55 ksi (min)	Comp = 65 Kips - 289 kN Ten = 65 Kips - 289 kN	ASTM A36 0.5 in - 12.7 mm	(2) 0.75 in x 4.0 in ASTM325 Structural Bolt (2) 0.75 in Nut/ASTM A563 Grade DH	None
Model PF-350	O.D. = 3.5 in - 88.9 mm Wall = 0.216 in - 5.5 mm API 5CT - J55 Yield Strength = 55 ksi (min)	Comp = 63 Kips - 280 kN Ten = 63 Kips - 280 kN	ASTM A36 0.5 in - 12.7 mm	(3) 0.75 in x 4.0 in ASTM325 Structural Bolt (3) 0.75 in Nut/ASTM A563 Grade DH	None
Model PF-350(80)	O.D. = 3.5 in - 88.9 mm Wall = 0.254 in - 6.5 mm API 5CT - J55 Yield Strength = 55 ksi (min)	Comp = 80 Kips - 320 kN Ten = 80 Kips - 355 kN	ASTM A36 0.5 in - 12.7 mm	(3) 0.75 in x 4.0 in ASTM325 Structural Bolt (3) 0.75 in Nut/ASTM A563 Grade DH	None

(1) The values shown only address torque correlated soil capacity. Other mechanical limit states of the pile/anchor, its couplers, and its connections to the structure (brackets) may also govern the design capacity. Refer to the manufacturer's technical manual for further information."

(2) Large diameter helical piles develop capacity by a combination of both end-bearing and skin friction. The ultimate pile capacity is calculated based on the site-specific soil profile on a case-by-case basis. Load tests are often recommended for larger shaft sizes to identify a site-specific torque correlation factor (Kt), to determine the pile displacement versus load, and to verify the helical pile configuration.